

ABSTRACTS FOR THE 2ND INTERNATIONAL CONFERENCE ON ORAL MICROBIOLOGY AND ORAL IMMUNOLOGY

NEW FRONTIERS IN MUCOSAL CANCER THERAPY

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HALAL & ORGANIC MOUTH-WASH: FRANKINCENSE ESSENTIAL OIL & HYDROSOL BOSWELLIA MOUTH-WASH ESSENTIAL OIL (BOMEQ)

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ABSTRACT

Introduction: This is a proto-type product which is based on Frankincense essential oil and hydrosol. **Methods:** Three oleo gum resin species, namely; *Boswellia carterii* (BC), *Boswellia frereana* (BF), and *Commiphora myrrha* (CM) of Burceraceae family were extracted for their essential oil by hydro-distillation. They were screened for their potential of anti-cariogenic activity by in-vitro experimental study of two main bacterial species (*Streptococcus mutans* and *Lactobacillus spp*), which are considered the main cause of dental and mouth diseases. **Results:** Methanol and acetone extracts of the three plants inhibited the growth of the bacteria. However, BF-methanol extract shows the greatest inhibition followed by BC and CM respectively. Hence, the obtained result encourages proceeding further thorough investigation to benefit the positive outcomes of these plant extracts in terms of introducing new potential antimicrobial formulations, such as mouth wash which can be used for mouth cleansing and protection from the diseases such as mouth ulcers, gingivitis, sinusitis, glandular fever and brucellosis as well as dental caries. This result can be converted to Boswellia Mouthwash Essential Oil (BosMEO) and Boswellia Mouthwash Hydrosol (BosMoHy) based products. This new plant extract product can be exploited for further research for its potential used as moth infection natural treatments such as mouth ulcers, gingivitis, sinusitis, glandular fever, brucellosis as well as respiratory problem. It is free of synthetic chemicals, organic, natural, plant based, and halal with no major health side effects. **Conclusion:** Plant-based product which is free from synthetic chemicals and with minimal side effects will satisfy its quality efficiency.